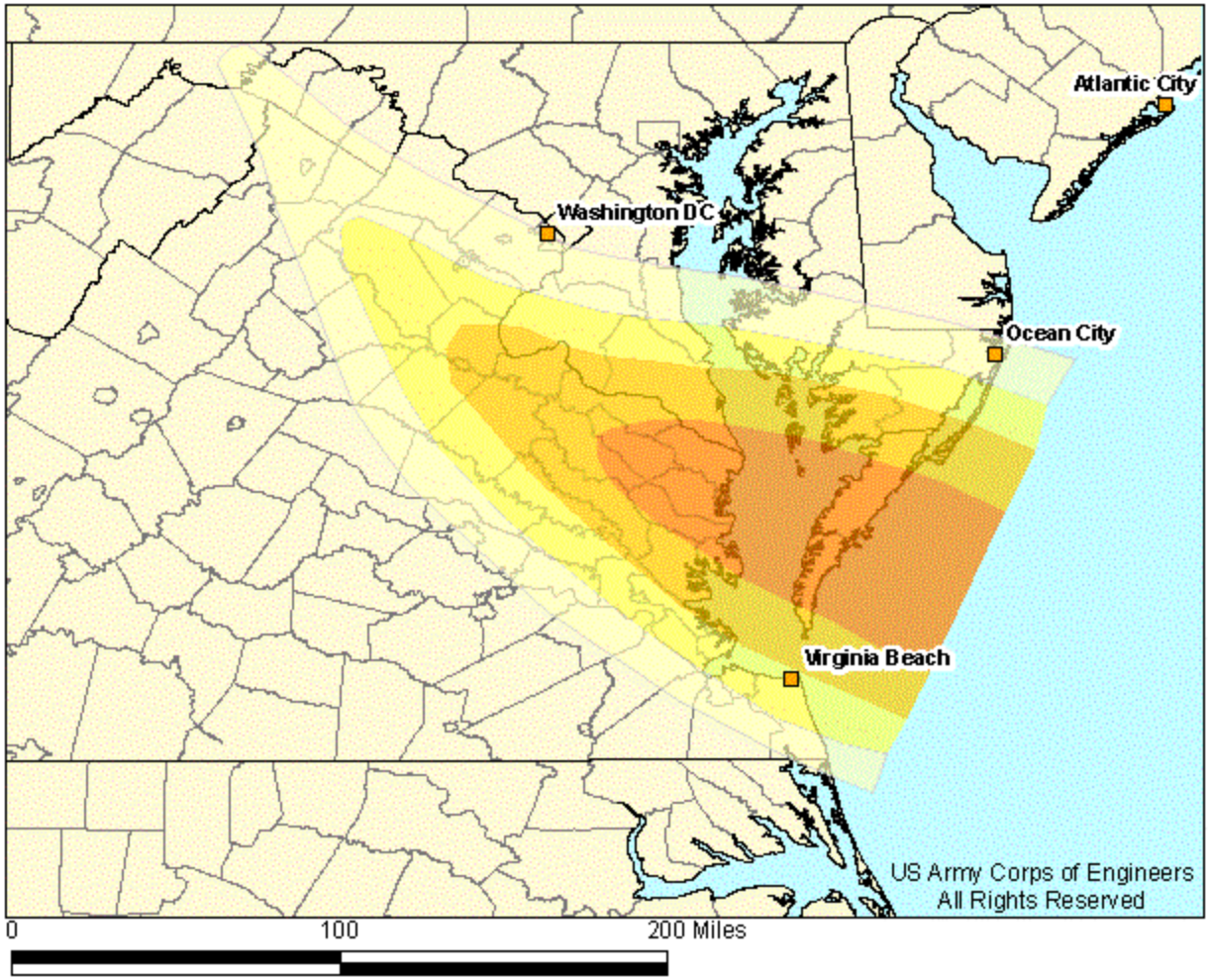
Hurricane NoName Projected Damage Areas

US Army Corps of Engineers

Landfall Has Occurred

For Planning Purposes Only!



Landfall Projected Damage Areas

This model is based on a Category 3 storm making landfall on coastal Virginia.

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

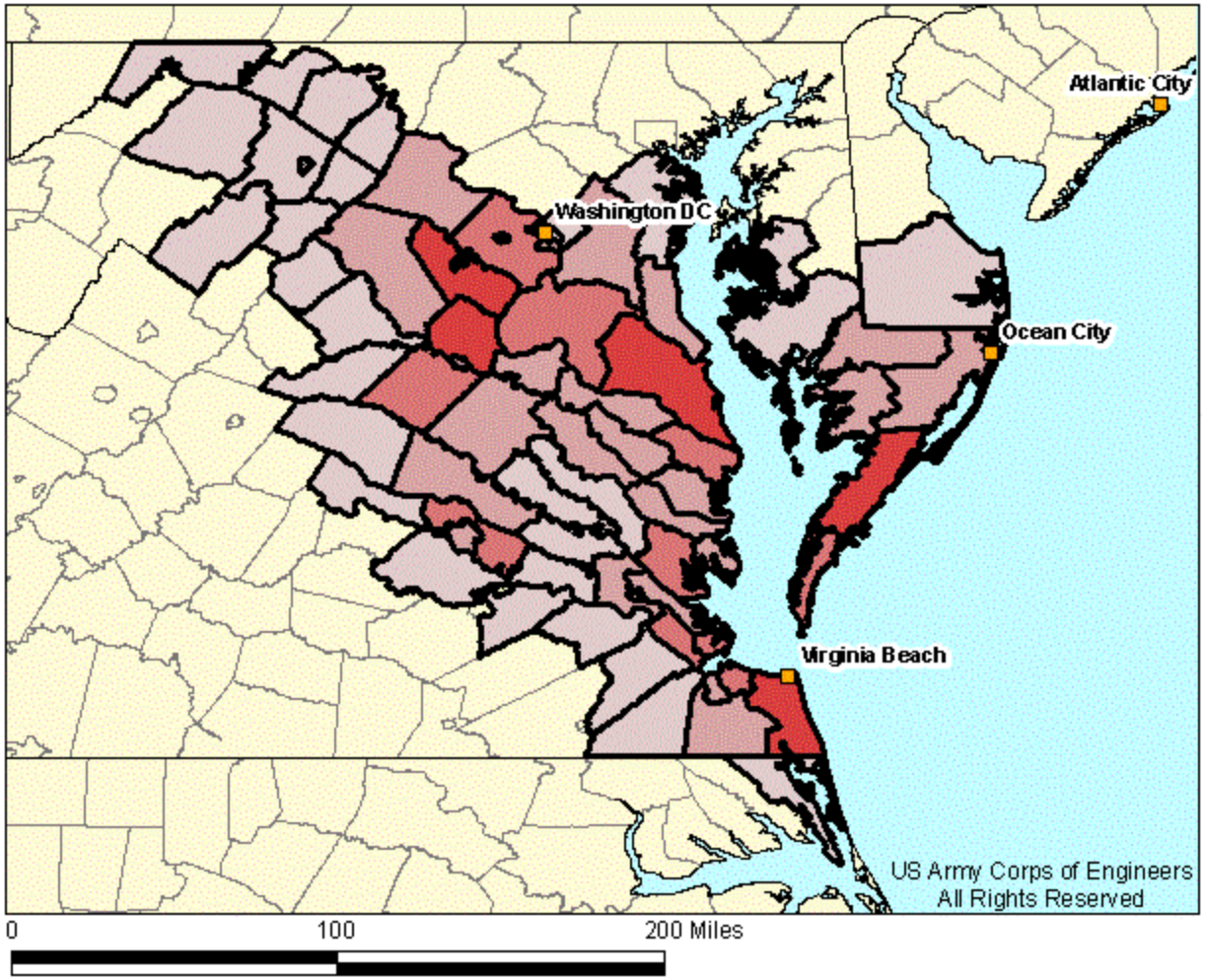
Hurricane NoName Projected Damage Areas	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 18

US Army Corps of Engineers

Hurricane NoName Debris Model

Landfall Has Occurred

For Planning Purposes Only!



Landfall Debris Model Results

Virginia - 9,544,000 Yards
Maryland - 1,632,000 Yards
West Virginia - 47,000 Yards
Delaware - 20,000 Yards
District of Columbia - 4,000 Yards
North Carolina - 2,000 Yards

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Debris Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Debris Model

Landfall Has Occurred

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Delaware		Sussex County	20,000
Delaware	20,000		
District of Columbia		District of Columbia	4,000
District of Columbia	4,000		
Maryland		Allegany County	3,000
		Anne Arundel County	2,000
		Calvert County	150,000
		Charles County	273,000
		Dorchester County	44,000
		Prince George's County	140,000
		Somerset County	155,000
		St. Mary's County	601,000
		Talbot County	3,000
		Wicomico County	125,000
		Worcester County	136,000
Maryland	1,632,000		
North Carolina		Currituck County	2,000
North Carolina	2,000		
Virginia		Accomack County	624,000
		Alexandria city	152,000
		Arlington County	95,000
		Caroline County	160,000
		Charles City County	12,000
		Chesapeake city	225,000
		Chesterfield County	< 1,000
		Clarke County	19,000
		Culpeper County	60,000

State	Yards per State	County	Yards per County
Virginia		Essex County	180,000
(continued)		Fairfax County	319,000
		Fairfax city	34,000
		Falls Church city	19,000
		Fauquier County	145,000
		Frederick County	82,000
		Fredericksburg city	187,000
		Gloucester County	379,000
		Goochland County	< 1,000
		Hampton city	342,000
		Hanover County	127,000
		Henrico County	251,000
		Isle of Wight County	31,000
		James City County	173,000
		King George County	185,000
		King William County	83,000
		King and Queen County	90,000
		Lancaster County	219,000
		Loudoun County	137,000
		Louisa County	13,000
		Manassas Park city	13,000
		Manassas city	49,000
		Mathews County	154,000
		Middlesex County	175,000
		New Kent County	49,000
		Newport News city	345,000
		Norfolk city	456,000
		Northampton County	254,000
		Northumberland County	272,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Debris Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Debris Model

Landfall Has Occurred

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Virginia		Orange County	29,000
(continued)		Poquoson city	47,000
		Portsmouth city	107,000
		Prince George County	4,000
		Prince William County	573,000
		Rappahannock County	7,000
		Richmond County	126,000
		Richmond city	145,000
		Shenandoah County	< 1,000
		Spotsylvania County	435,000
		Stafford County	601,000
		Suffolk city	32,000
		Surry County	12,000
		Virginia Beach city	827,000
		Warren County	43,000
		Westmoreland County	217,000
		Williamsburg city	28,000
		Winchester city	39,000
		York County	162,000
Virginia	9,544,000		
West Virginia		Berkeley County	19,000
		Hampshire County	3,000
		Jefferson County	17,000
		Morgan County	8,000
West Virginia	47,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Debris Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

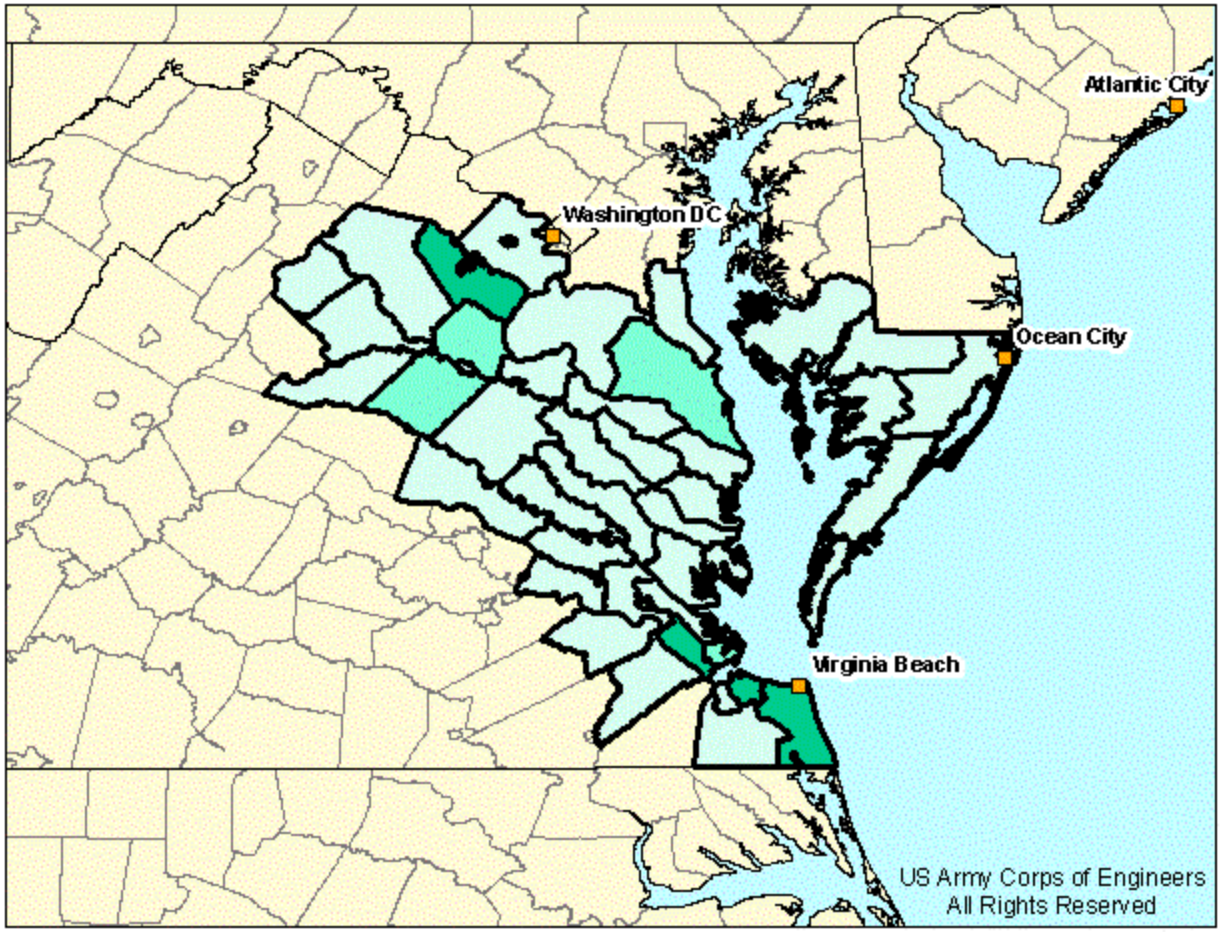
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Commodities Model

Landfall Has Occurred

For Planning Purposes Only!



Landfall Water Model Results

Day One / Day Two / Day Three
Virginia – 31/62/125 Truckloads
Maryland – 5/10/19 Truckloads

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC ***(1700 EDT 09/23/2009)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Commodities Model	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 5 of 18

US Army Corps of Engineers

Hurricane NoName Commodities Model

Landfall Has Occurred

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Maryland		Calvert County	3
		Charles County	3
		Dorchester County	1
		Somerset County	2
		St. Mary's County	8
		Wicomico County	1
		Worcester County	1
Maryland	19		
Virginia		Accomack County	2
		Caroline County	2
		Charles City County	1
		Chesapeake city	1
		Culpeper County	1
		Essex County	1
		Fairfax County	1
		Fauquier County	4
		Fredericksburg city	2
		Gloucester County	3
		Hampton city	8
		Hanover County	2
		Isle of Wight County	1
		James City County	4
		King George County	2
		King William County	1
		King and Queen County	1
		Lancaster County	1
		Manassas city	1
		Mathews County	1
		Middlesex County	1
		New Kent County	1

State	Truckloads per State	County	Truckloads per County
Virginia		Newport News city	13
(continued)		Norfolk city	12
		Northampton County	1
		Northumberland County	1
		Orange County	1
		Poquoson city	1
		Portsmouth city	1
		Prince William County	11
		Rappahannock County	1
		Richmond County	1
		Spotsylvania County	6
		Stafford County	7
		Surry County	1
		Virginia Beach city	20
		Westmoreland County	1
		Williamsburg city	1
		York County	4
Virginia	125		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Commodities Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

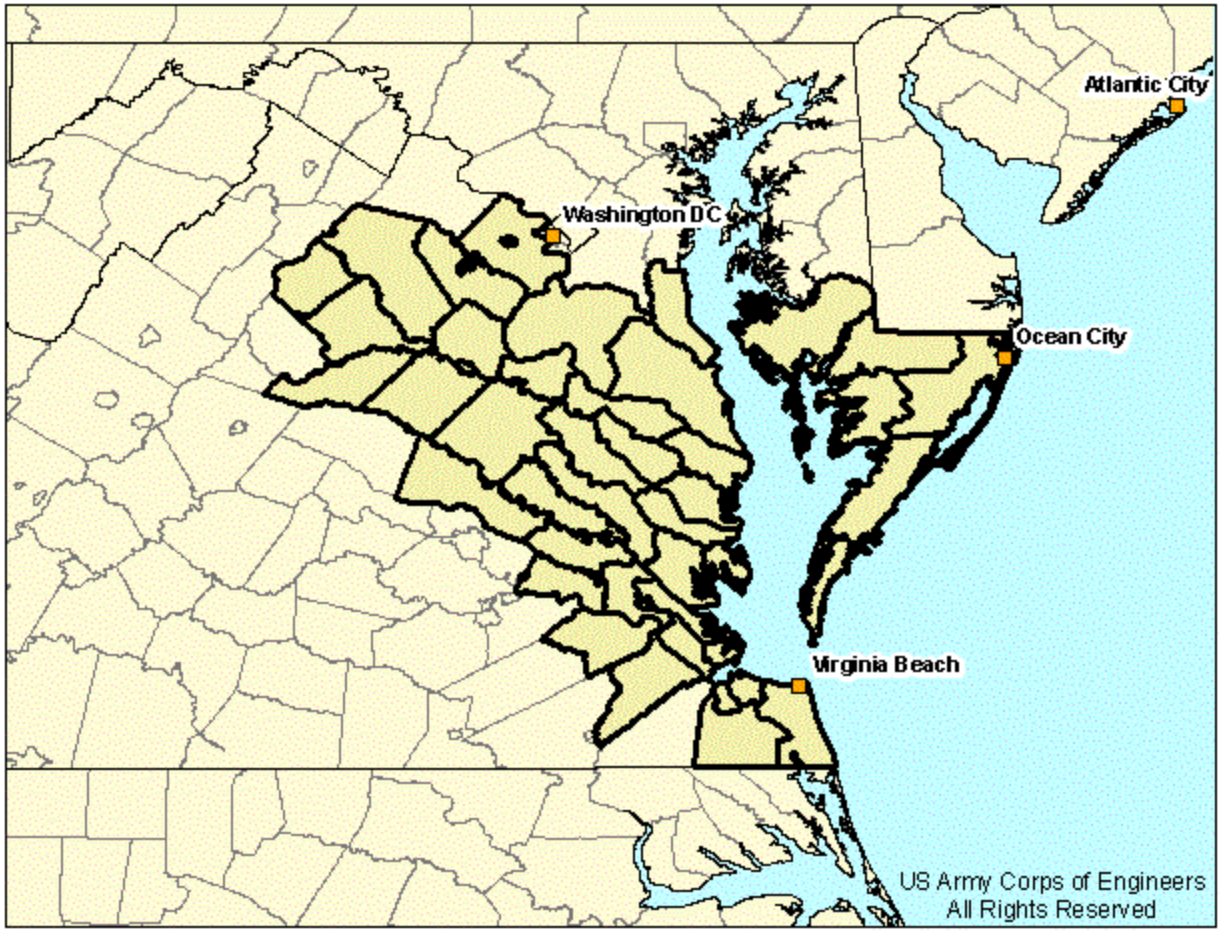
Sources:
HURREVAC
LRL-DEBRIS

Hurricane NoName Temporary Roofing Model

US Army Corps of Engineers

Landfall Has Occurred

For Planning Purposes Only!



Landfall Temporary Roofing Model Results

Virginia - 15,800
Maryland - 2,200

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast. Temporary roofing is based on 2% in CAT 1, 4% in CAT 2 and 7% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Roofing Model	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 7 of 18

US Army Corps of Engineers

Hurricane NoName Temporary Roofing Model

Landfall Has Occurred

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Maryland		Calvert County	300
		Charles County	400
		Dorchester County	< 100
		Somerset County	300
		St. Mary's County	1,000
		Wicomico County	< 100
		Worcester County	200
Maryland	2,200		
Virginia		Accomack County	900
		Caroline County	300
		Charles City County	< 100
		Chesapeake city	< 100
		Culpeper County	< 100
		Essex County	300
		Fairfax County	< 100
		Fauquier County	400
		Fredericksburg city	400
		Gloucester County	700
		Hampton city	800
		Hanover County	200
		Isle of Wight County	< 100
		James City County	500
		King George County	400
		King William County	200
		King and Queen County	200
		Lancaster County	400
		Manassas city	< 100
		Mathews County	300
		Middlesex County	300
		New Kent County	200

State	House Units per State	County	House Units per County
Virginia		Newport News city	800
(continued)		Norfolk city	1,000
		Northampton County	400
		Northumberland County	500
		Orange County	< 100
		Poquoson city	200
		Portsmouth city	< 100
		Prince William County	1,100
		Rappahannock County	< 100
		Richmond County	200
		Spotsylvania County	1,000
		Stafford County	1,200
		Surry County	< 100
		Virginia Beach city	2,000
		Westmoreland County	400
		Williamsburg city	< 100
		York County	500
Virginia	15,800		

Temporary roofing is based on 2% in CAT 1, 4% in CAT 2 and 7% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Roofing Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

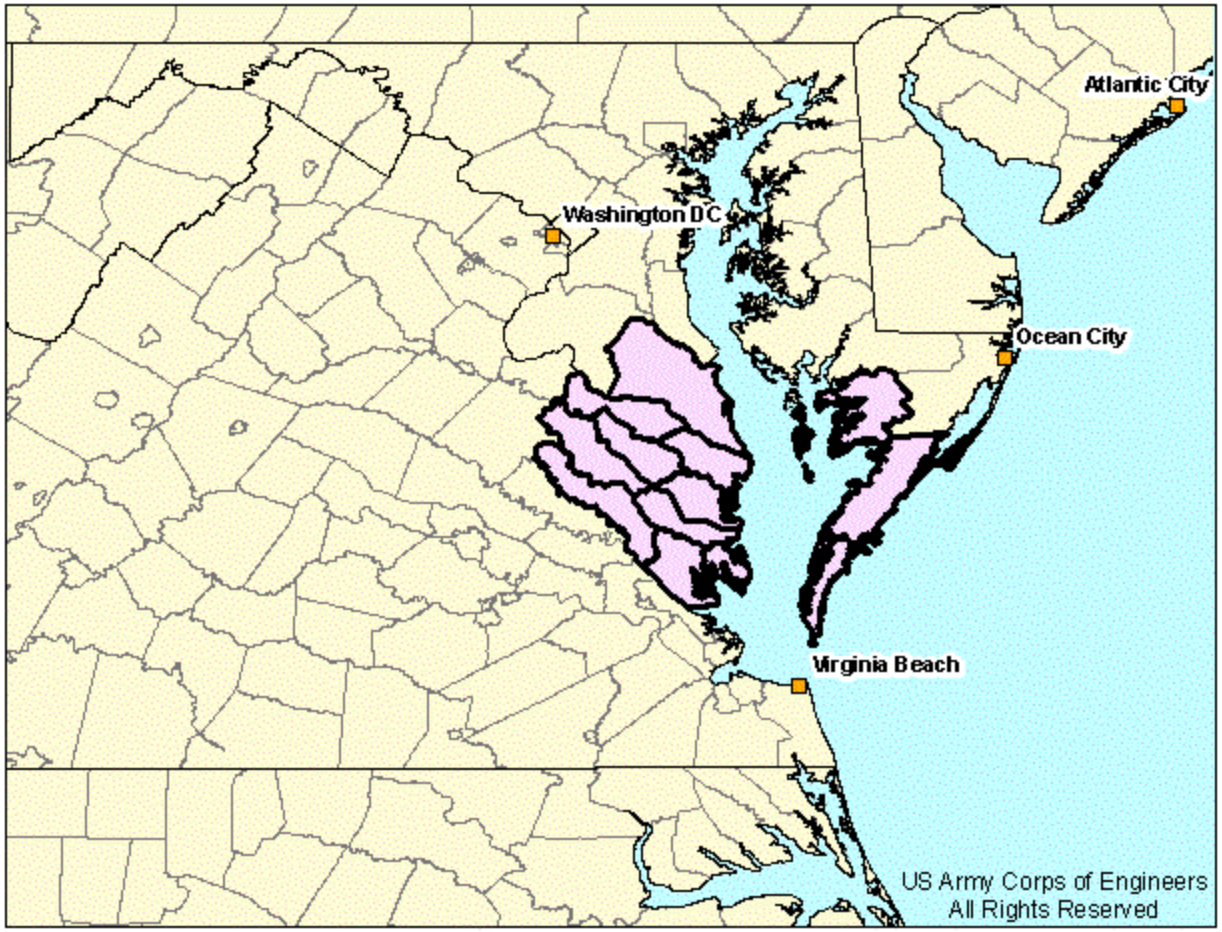
Sources:
HURREVAC
LRL-DEBRIS

Hurricane NoName Temporary Housing Model

US Army Corps of Engineers

Landfall Has Occurred

For Planning Purposes Only!



Landfall Temporary Housing Model Results

Virginia < 1,000 Units
Maryland < 100 Units

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast. Temporary housing is based on 1% in CAT 3. The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Housing Model	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 9 of 18

US Army Corps of Engineers

Hurricane NoName Temporary Housing Model

Landfall Has Occurred

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Maryland		Somerset County	< 100
		St. Mary's County	< 100
Maryland			
Virginia		Accomack County	< 100
		Essex County	< 100
		Gloucester County	< 100
		King and Queen County	< 100
		Lancaster County	< 100
		Mathews County	< 100
		Middlesex County	< 100
		Northampton County	< 100
		Northumberland County	< 100
		Richmond County	< 100
		Westmoreland County	< 100
Virginia			

Temporary housing is based on 1% in CAT 3.
The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Housing Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

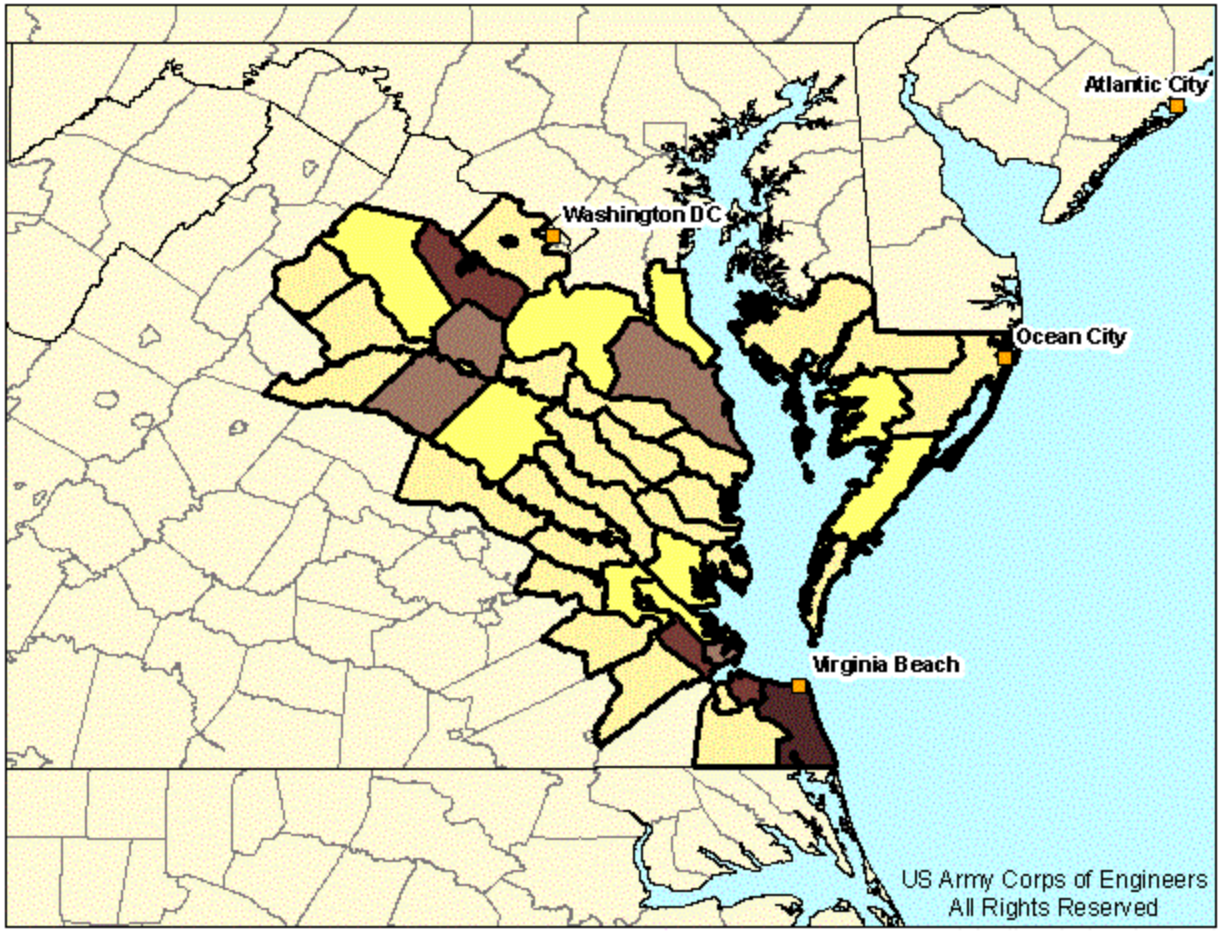
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Population Model

Landfall Expected In About 0 Hours

For Planning Purposes Only!



Landfall Population Model Results

Virginia - 2,026,000
Maryland - 307,000

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2008 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Population Model	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 11 of 18

US Army Corps of Engineers

Hurricane NoName Population Model

Landfall Expected In About 0 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Maryland		Calvert County	43,000
		Charles County	50,000
		Dorchester County	2,000
		Somerset County	27,000
		St. Mary's County	152,000
		Wicomico County	16,000
		Worcester County	17,000
Maryland	307,000		
Virginia		Accomack County	38,000
		Caroline County	28,000
		Charles City County	< 1,000
		Chesapeake city	3,000
		Culpeper County	9,000
		Essex County	12,000
		Fairfax County	< 1,000
		Fauquier County	61,000
		Fredericksburg city	23,000
		Gloucester County	46,000
		Hampton city	146,000
		Hanover County	22,000
		Isle of Wight County	< 1,000
		James City County	73,000
		King and Queen County	7,000
		King George County	24,000
		King William County	17,000
		Lancaster County	15,000
		Manassas city	6,000
		Mathews County	10,000
		Middlesex County	13,000
		New Kent County	17,000

State	Population per State	County	Population per County
Virginia		Newport News city	241,000
(continued)		Norfolk city	229,000
		Northampton County	14,000
		Northumberland County	14,000
		Orange County	6,000
		Poquoson city	12,000
		Portsmouth city	5,000
		Prince William County	201,000
		Rappahannock County	< 1,000
		Richmond County	10,000
		Spotsylvania County	110,000
		Stafford County	122,000
		Surry County	< 1,000
		Virginia Beach city	398,000
		Westmoreland County	19,000
		Williamsburg city	13,000
		York County	62,000
Virginia	2,026,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2008 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Population Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

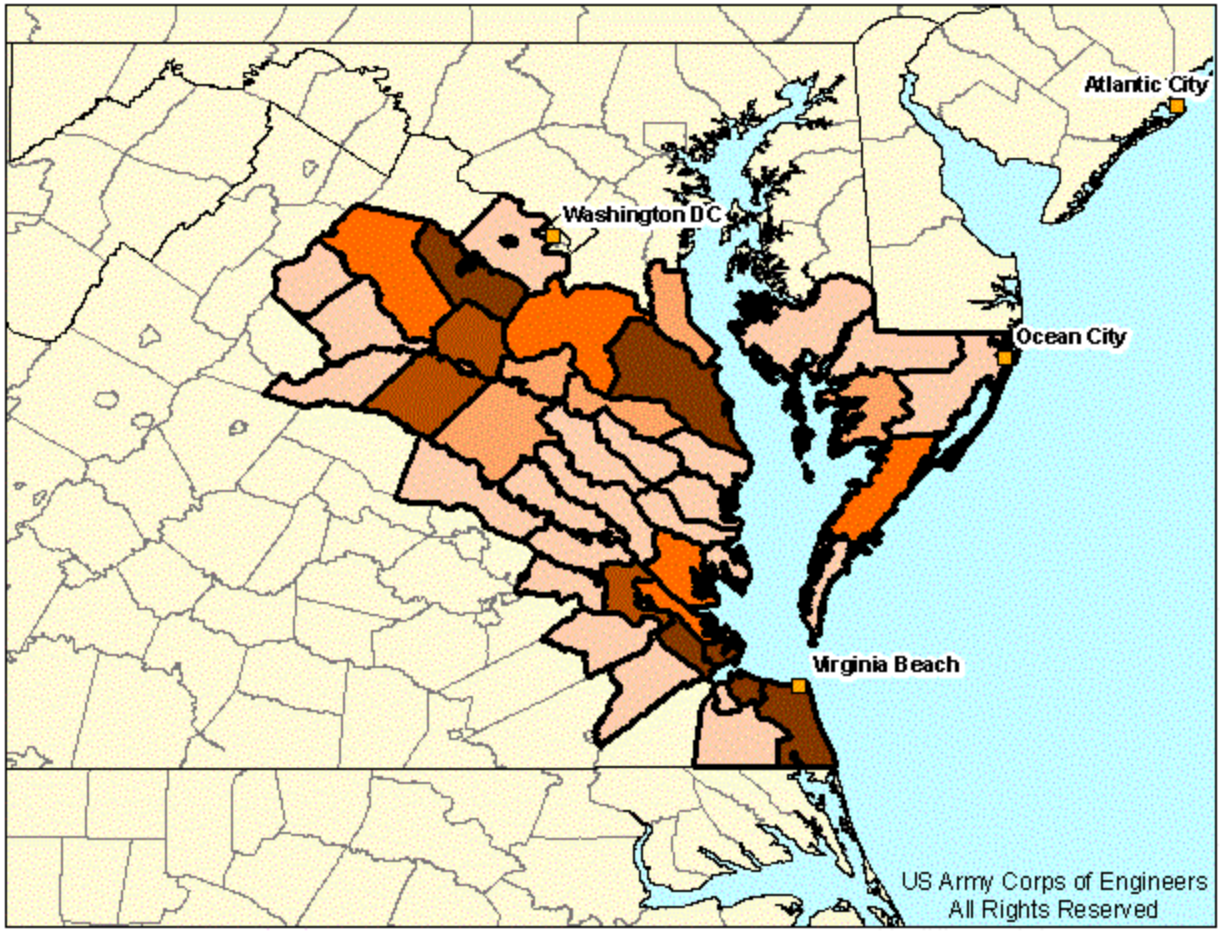
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Households Model

Landfall Expected In About 0 Hours

For Planning Purposes Only!



Landfall Households Model Results

Virginia - 746,000
Maryland - 111,000

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2008 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane NoName Households Model	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 13 of 18

US Army Corps of Engineers

Hurricane NoName Households Model

Landfall Expected In About 0 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Maryland		Calvert County	15,000
		Charles County	18,000
		Dorchester County	< 1,000
		Somerset County	9,000
		St. Mary's County	55,000
		Wicomico County	7,000
		Worcester County	7,000
Maryland	111,000		
Virginia		Accomack County	16,000
		Caroline County	10,000
		Charles City County	< 1,000
		Chesapeake city	< 1,000
		Culpeper County	4,000
		Essex County	5,000
		Fairfax County	< 1,000
		Fauquier County	22,000
		Fredericksburg city	10,000
		Gloucester County	18,000
		Hampton city	54,000
		Hanover County	8,000
		Isle of Wight County	< 1,000
		James City County	29,000
		King and Queen County	3,000
		King George County	9,000
		King William County	6,000
		Lancaster County	7,000
		Manassas city	2,000
		Mathews County	4,000
		Middlesex County	6,000
		New Kent County	7,000

State	Households per State	County	Households per County
Virginia		Newport News city	94,000
(continued)		Norfolk city	83,000
		Northampton County	6,000
		Northumberland County	6,000
		Orange County	3,000
		Poquoson city	5,000
		Portsmouth city	2,000
		Prince William County	65,000
		Rappahannock County	< 1,000
		Richmond County	4,000
		Spotsylvania County	38,000
		Stafford County	40,000
		Surry County	< 1,000
		Virginia Beach city	146,000
		Westmoreland County	8,000
		Williamsburg city	4,000
		York County	22,000
Virginia	746,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2008 values.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane NoName Households Model

Generated By:
Siemsen, LRL 2100 EDT 09/23/2009

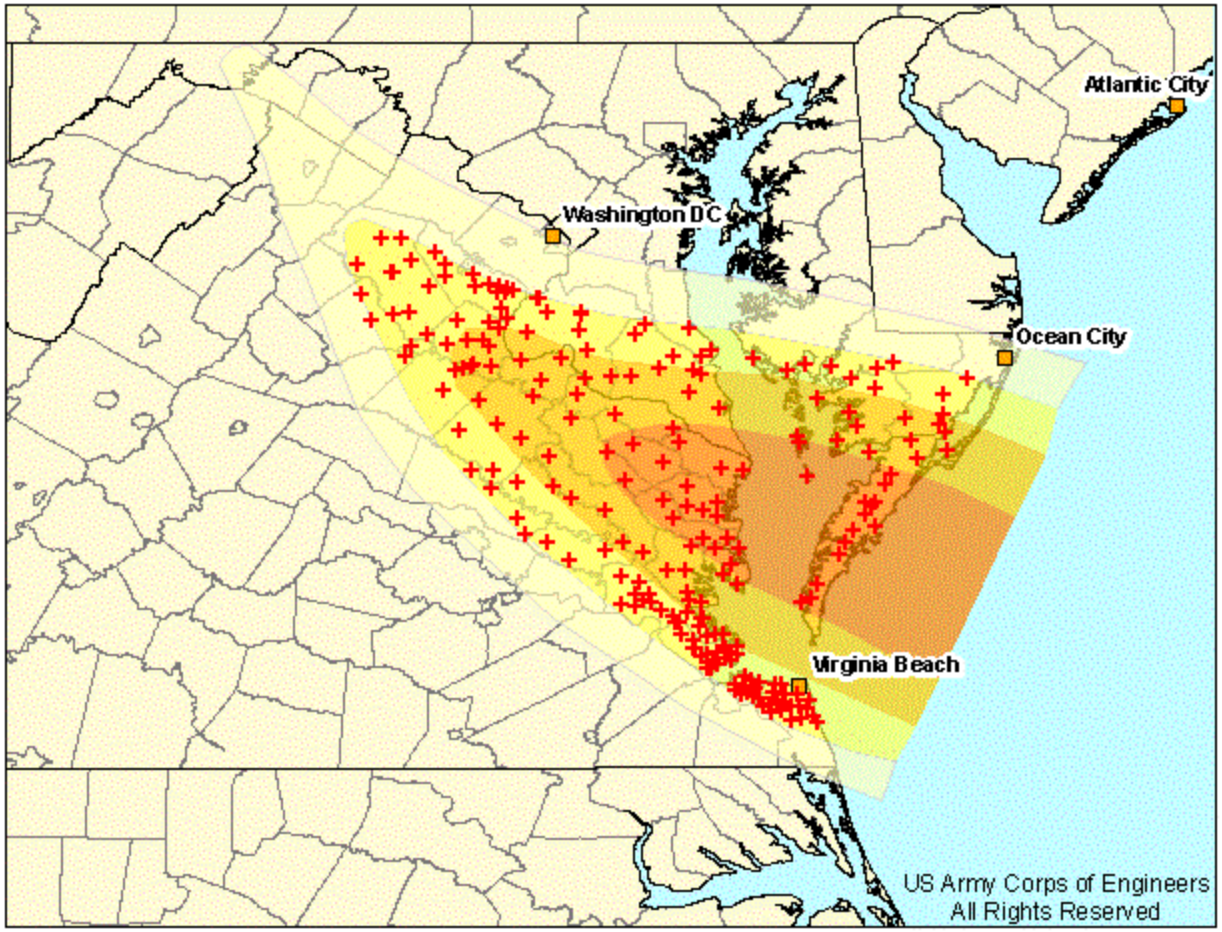
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane NoName Fire Stations

Landfall Expected In About 0 Hours

For Planning Purposes Only!



0 100 200 Miles

+ Fire Stations

Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Virginia - 184
Maryland - 40

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

Information provided on this page displays a Category 3 storm making landfall on coastal Virginia. These projections are based on information from the NHC (1700 EDT 09/23/2009) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

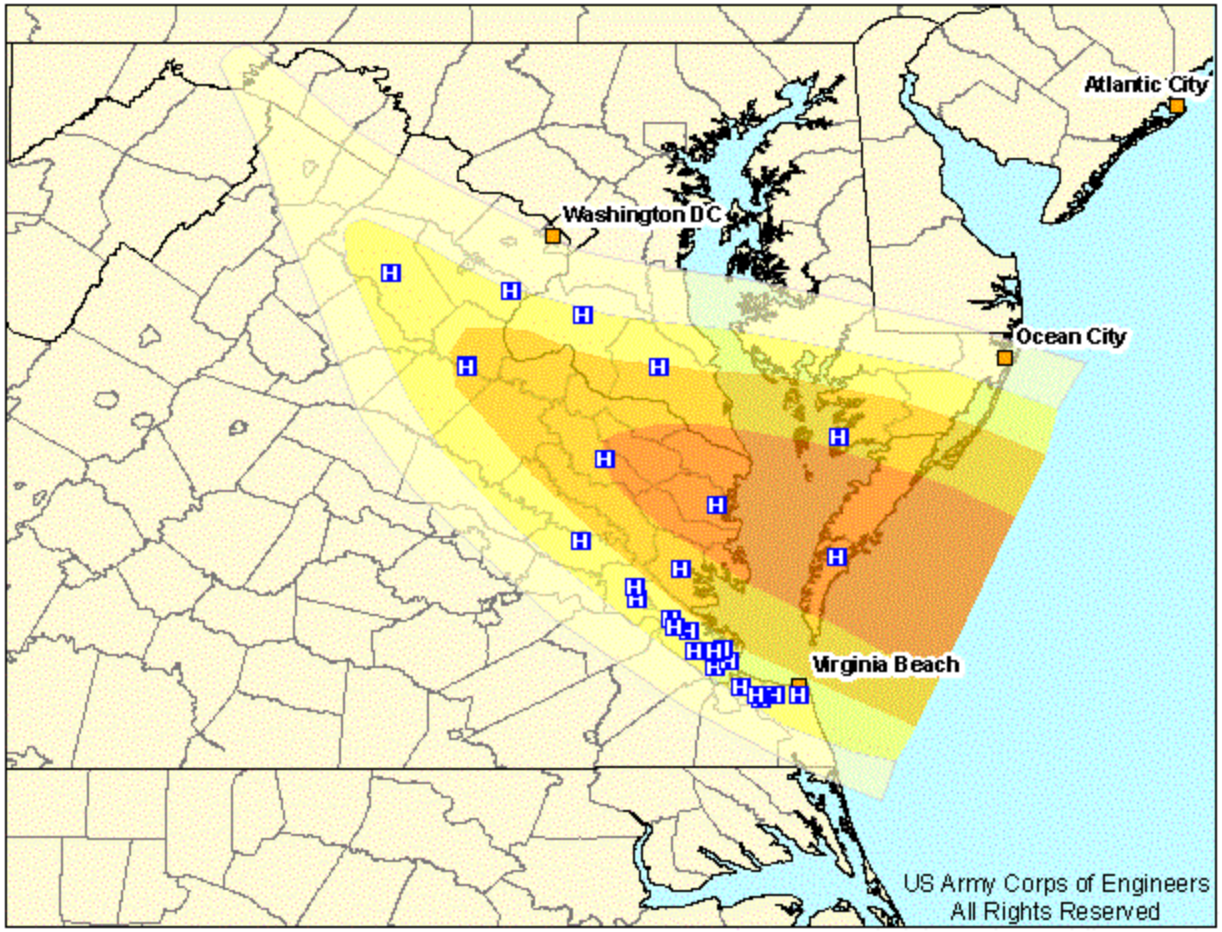
Hurricane NoName Fire Stations	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane NoName Hospitals

Landfall Expected In About 0 Hours

For Planning Purposes Only!



0 100 200 Miles

H Hospitals

Most Probable Landfall Hospitals Inside Hurricane Force Winds

Virginia - 27
Maryland - 3

Model results per County on following page

This model is based on a Category 3 storm making landfall on coastal Virginia.

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The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

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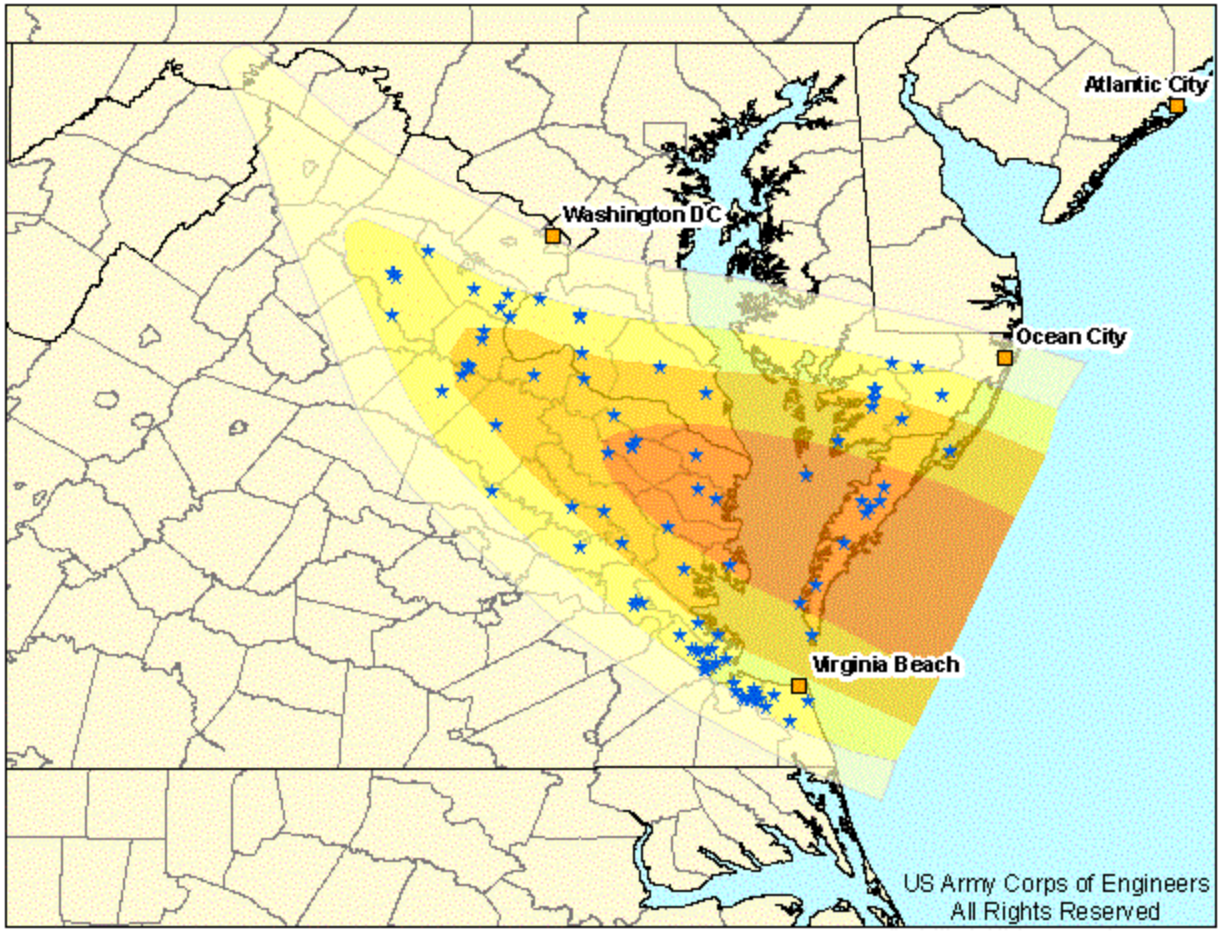
Hurricane NoName Hospitals	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 16 of 18

US Army Corps of Engineers

Hurricane NoName Law Enforcement

Landfall Expected In About 0 Hours

For Planning Purposes Only!



0 100 200 Miles

★ Law Enforcement

Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Virginia - 88
Maryland - 18

Model results per County on following page

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The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

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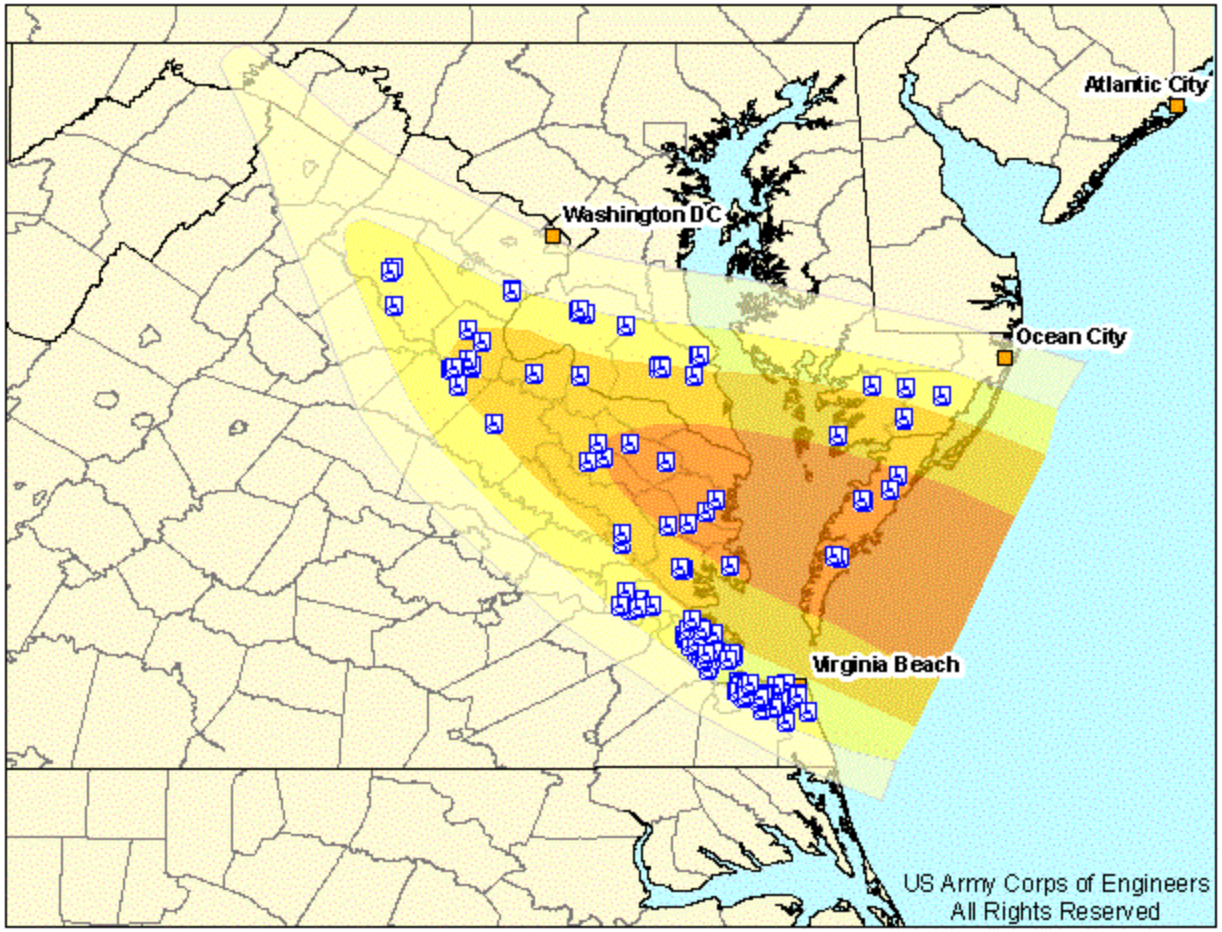
Hurricane NoName Law Enforcement	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 17 of 18

US Army Corps of Engineers

Hurricane NoName Nursing Homes

Landfall Expected In About 0 Hours

For Planning Purposes Only!



0 100 200 Miles

Nursing Homes

Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Virginia - 136
Maryland - 18

Model results per County on following page

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The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2008).

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Hurricane NoName Nursing Homes	
Generated By: Siemsen, LRL 2100 EDT 09/23/2009	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 18